

CLAIMS

What is claimed is:

1. A plate assembly, comprising:
 - a first longitudinal plate having an end defined by longitudinal prongs;
 - a second longitudinal plate having a longitudinal bore, the longitudinal bore being adapted to receive the prongs for longitudinal translation therein through a plurality of positions; and
 - a lock assembly for locking the prongs within the bore at one of the positions; wherein each plate comprises a feature that is usable to couple the plate to a body structure; and wherein
 - the bore has an inner surface and the lock assembly presses the prongs against the inner surface; and wherein
 - the prongs are laterally adjacent one another and the lock assembly separates the prongs to press them against the inner surface; and wherein
 - the lock assembly comprises a multi-positionable cam between the prongs.
2. The plate assembly of claim 1, wherein the cam is alternately positionable in a first position, in which the cam permits the prongs to longitudinally translate within the bore, and a second position, in which the cam maintains the prongs against the inner surface.
3. The plate assembly of claim 2, wherein when the cam is in the first position, it is longitudinally translatable between the prongs through a plurality of longitudinal translation positions.
4. The plate assembly of claim 1, wherein the cam is a rotatable cam.
5. The plate assembly of claim 4, wherein the cam is rotatable into a first position, in which the cam permits the prongs to longitudinally translate within the bore, and a second position, in which the cam maintains the prongs against the inner surface.

6. The plate assembly of claim 5, wherein in the second position, the cam is rotated ninety degrees with respect to the first position.

7. The plate assembly of claim 5, wherein when the cam is in the first position, it is longitudinally translatable between the prongs through a plurality of longitudinal translation positions.

8. The plate assembly of claim 1, wherein the cam has a portion that engages the prongs for separation, the portion having a width smaller than a resting distance between the prongs and a length greater than the resting distance between the prongs and resting distances between each prong and the inner surface, wherein the resting distance between the prongs is a distance between the prongs when the prongs are not engaged by the cam, and each of the resting distances between each prong and the inner surface is a distance between each prong and the inner surface when the prongs are not engaged by the cam.

9. The plate assembly of claim 8, wherein the cam has flanges that maintain the cam in the plate assembly, each of the flanges having a cross-section greater than the length of the portion of the cam.

10. An orthopedic device comprising a longitudinal plate assembly having an adjustable length and two ends, each of the ends comprising a feature that can be used to couple the end to a body structure; wherein

the assembly comprises two longitudinal plates that can translate longitudinally with respect to one another through a plurality of positions and be secured with respect to one another at one of the positions, thereby enabling the length of the assembly to be adjusted; and wherein

one of the plates has an end defined by longitudinal prongs and the other of the plates has a longitudinal bore, the longitudinal bore being adapted to receive the prongs for longitudinal translation therein; and wherein

the assembly further comprises a lock assembly for locking the prongs within the bore at one of the positions; and wherein

the bore has an inner surface and the lock assembly presses the prongs against the inner surface; and wherein

the prongs are laterally adjacent one another and the lock assembly separates the prongs to press them against the inner surface; and wherein

the lock assembly comprises a multi-positionable cam between the prongs.

11. The plate assembly of claim 10, wherein the cam is alternately positionable in a first position, in which the cam permits the prongs to longitudinally translate within the bore, and a second position, in which the cam maintains the prongs against the inner surface.

12. The plate assembly of claim 11, wherein when the cam is in the first position, it is longitudinally translatable between the prongs through a plurality of longitudinal translation positions.

13. The plate assembly of claim 10, wherein the cam is a rotatable cam.

14. The plate assembly of claim 13, wherein the cam is rotatable into a first position, in which the cam permits the prongs to longitudinally translate within the bore, and a second position, in which the cam maintains the prongs against the inner surface.

15. The plate assembly of claim 14, wherein in the second position, the cam is rotated ninety degrees with respect to the first position.

16. The plate assembly of claim 14, wherein when the cam is in the first position, it is longitudinally translatable between the prongs through a plurality of longitudinal translation positions.

17. The plate assembly of claim 10, wherein the cam has a portion that engages the prongs for separation, the portion having a width smaller than a resting distance between the prongs and a length greater than the resting distance between the prongs and resting distances between each prong and the inner surface, wherein the resting distance between the prongs is a distance between the prongs when the prongs are not engaged by the cam, and each of the resting

distances between each prong and the inner surface is a distance between each prong and the inner surface when the prongs are not engaged by the cam.

18. The plate assembly of claim 17, wherein the cam has flanges that maintain the cam in the plate assembly, each of the flanges having a cross-section greater than the length of the portion of the cam.